

CLAIMS

What is Claimed is:

1. A flexible token, comprising:
 - a first member, for insertion into a USB-compliant host computer female connector along a first longitudinal axis, USB-compliant host computer female connector having a plurality of host conductive surfaces;
 - a second member, disposed along a second longitudinal axis, the second member having a processor providing conditional access to data stored in a memory;
 - a flexible conductor, electrically coupling the processor and the plurality of host conductive surfaces when the first member is inserted into the USB-compliant host computer female connector; and
 - a bendable member, coupled to the first member and the second member, the bendable member permitting the second longitudinal axis rotated away from the first longitudinal axis.
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2. The apparatus of claim 1, wherein the bendable member comprises a joint permitting the second member to be rotated about the joint so that the second longitudinal axis is non-colinear with the first longitudinal axis.
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3. The apparatus of claim 2, wherein the joint is a ball joint.
4. The apparatus of claim 1, wherein the bendable member comprises a hinge.
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5. The apparatus of claim 4, wherein:
 - the hinge is bendable in a single plane; and
 - the bendable member further comprises a rotatable member permitting rotation of the plane.

6. The apparatus of claim 5, wherein the bendable member comprises a gooseneck.

7. The apparatus of claim 1, wherein the flexible conductor comprises:
5 a plurality of token conductive surfaces; and
flexible wires communicatively coupled to the plurality of token conductive surfaces and the processor.

8. The apparatus of claim 1, wherein the flexible conductor comprises:
10 a plurality of token conductive surfaces;
a flex circuit, having a plurality of conductive traces coupled to the plurality of token conductive surfaces and the processor.

9. The apparatus of claim 1, wherein the flexible conductor comprises a flex circuit, having:
15 a plurality of conductive traces communicatively coupled to the processor, the plurality of conductive traces including exposed portions presenting conductive surfaces contacting the host conductive surfaces when the first member is inserted into the USB host computer female connector.

20 10. The apparatus of claim 1, wherein:
the token comprises a fingerprint sensor disposed on a surface of the token; and
the bendable member is bendable in a plane perpendicular to the surface of the token.

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11. An apparatus for flexibly coupling a security token having a processor to a host computer, comprising:

a first member, having a male USB-compliant connector disposed along a first longitudinal axis and a plurality of conductive surfaces providing electrical communication with the host computer;

5 a second member, having a female USB-compliant connector disposed along a second longitudinal axis, the female USB connector having a second plurality of conductive surfaces electrically coupled to the first plurality of conductive surfaces via a flexible conductor; and

10 a joint, coupled to the first member and the second member, the joint permitting the second member to be rotated about the joint so that the second longitudinal axis is non-colinear with the first longitudinal axis.

12. The apparatus of claim 11, wherein the flexible wiring comprises a flex circuit.

13. The apparatus of claim 12, wherein the flex circuit comprises a plurality of conductive traces having first exposed portions forming the first plurality of conductive surfaces and second exposed portions forming the second plurality of conductive surfaces.

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14. The apparatus of claim 13, wherein the joint comprises a ball joint.

15. The apparatus of claim 13, wherein the joint comprises a hinge.

16. An apparatus for coupling a security token having a processor to a host computer, comprising:

a first member, for insertion into a USB-compliant host computer connector along a first longitudinal axis, the first member having a plurality of conductive surfaces providing electrical communication with the host computer;

5 a second member disposed along a second longitudinal axis;
 a joint, coupled to the first member and the second member, the joint permitting the second member to be rotated about the joint so that the second longitudinal axis is not colinear with the first longitudinal axis; and

10 flexible wiring, electrically coupled to the plurality of conductive surfaces, for providing communications between the host processor and the computer.

17. An apparatus for coupling a security token having a processor to a host computer, comprising:

15 a first member, having a male USB-compliant connector disposed along a first longitudinal axis and a plurality of conductive surfaces providing electrical communication with the host computer;

20 a second member, having a female USB-compliant connector disposed along a second longitudinal axis, the female USB connector having a second plurality of conductive surfaces electrically coupled to the first plurality of conductive surfaces via flexible wiring; and

 a joint, coupled to the first member and the second member, the joint permitting the second member to be rotated about the joint so that the second longitudinal axis is not colinear with the first longitudinal axis.

18. A method of flexibly coupling a token to a host computer, the token comprising a processor providing conditional access to data stored in a memory communicatively coupled to the processor, the method comprising the steps of:

- inserting a first member of the token into a USB-compliant host computer connector along a first longitudinal axis; and
- 5 bending the inserted token so that a longitudinal axis of a second member of the token is non-colinear with the first longitudinal axis.

19. The method of claim 18, wherein the second member comprises the
10 processor.